

**METHOD AND APPARATUS FOR REMOVING PHOTORESIST FROM A
SUBSTRATE**

ABSTRACT OF THE DISCLOSURE

A method and system for removing photoresist from a substrate in a plasma processing system comprising: introducing a process gas comprising N_xO_y , wherein x, y represent integers greater than or equal to unity. Additionally, the process chemistry can further comprise the addition of an inert gas, such as a Noble gas (i.e., He, Ne, Ar, Kr, Xe, Rn). The present invention further presents a method for forming a feature in a thin film on a substrate, wherein the method comprises: forming a dielectric layer on a substrate; forming a photoresist pattern on the dielectric layer; transferring the photoresist pattern to the dielectric layer by etching; and removing the photoresist from the dielectric layer using a process gas comprising N_xO_y , wherein x and y are integers greater than or equal to unity.